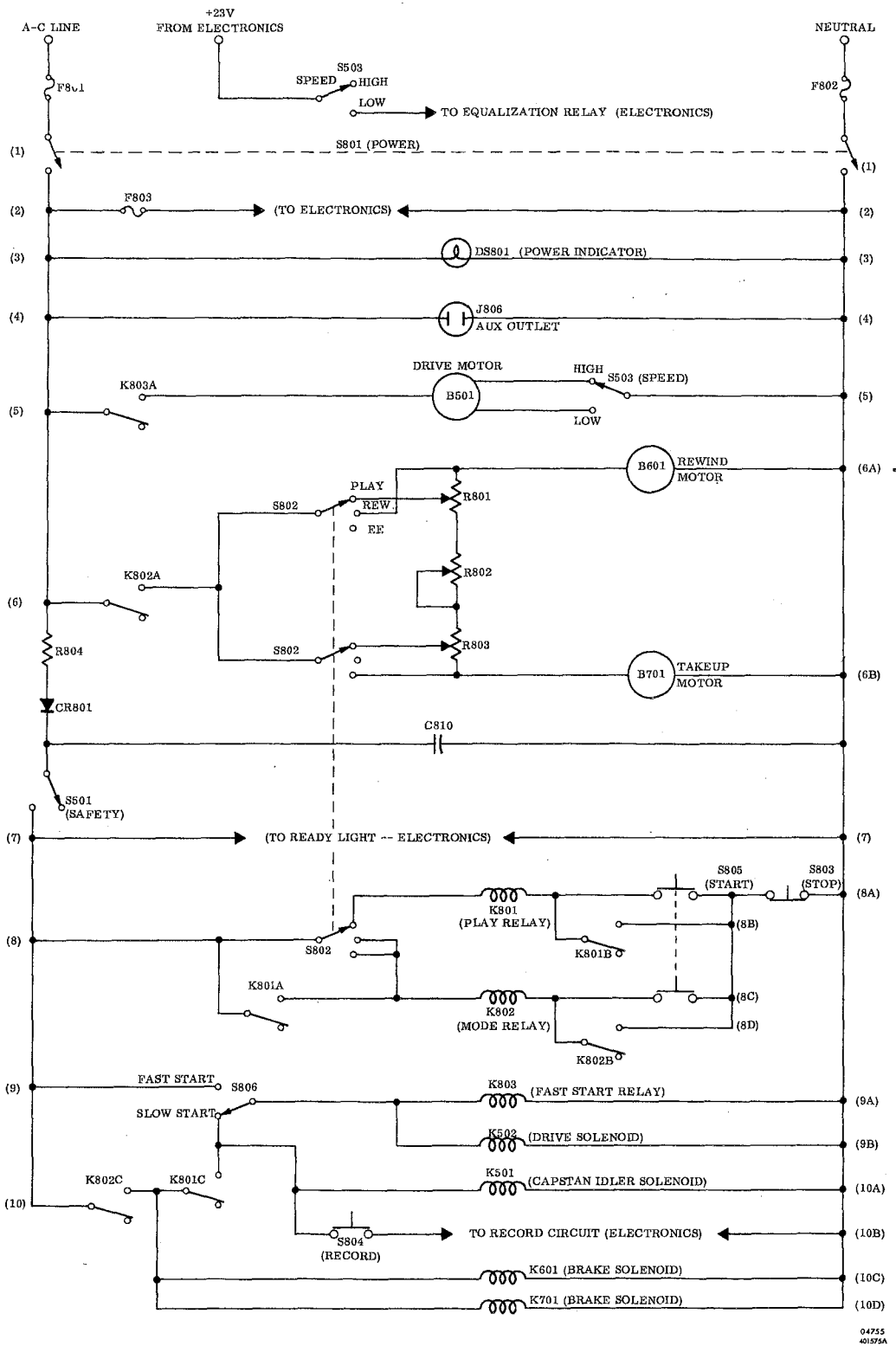


Fig. 7-1 Tape Transport Schematic Diagram



04255
40195A

Fig. 7-2 Tape Transport Simplified Control Diagram

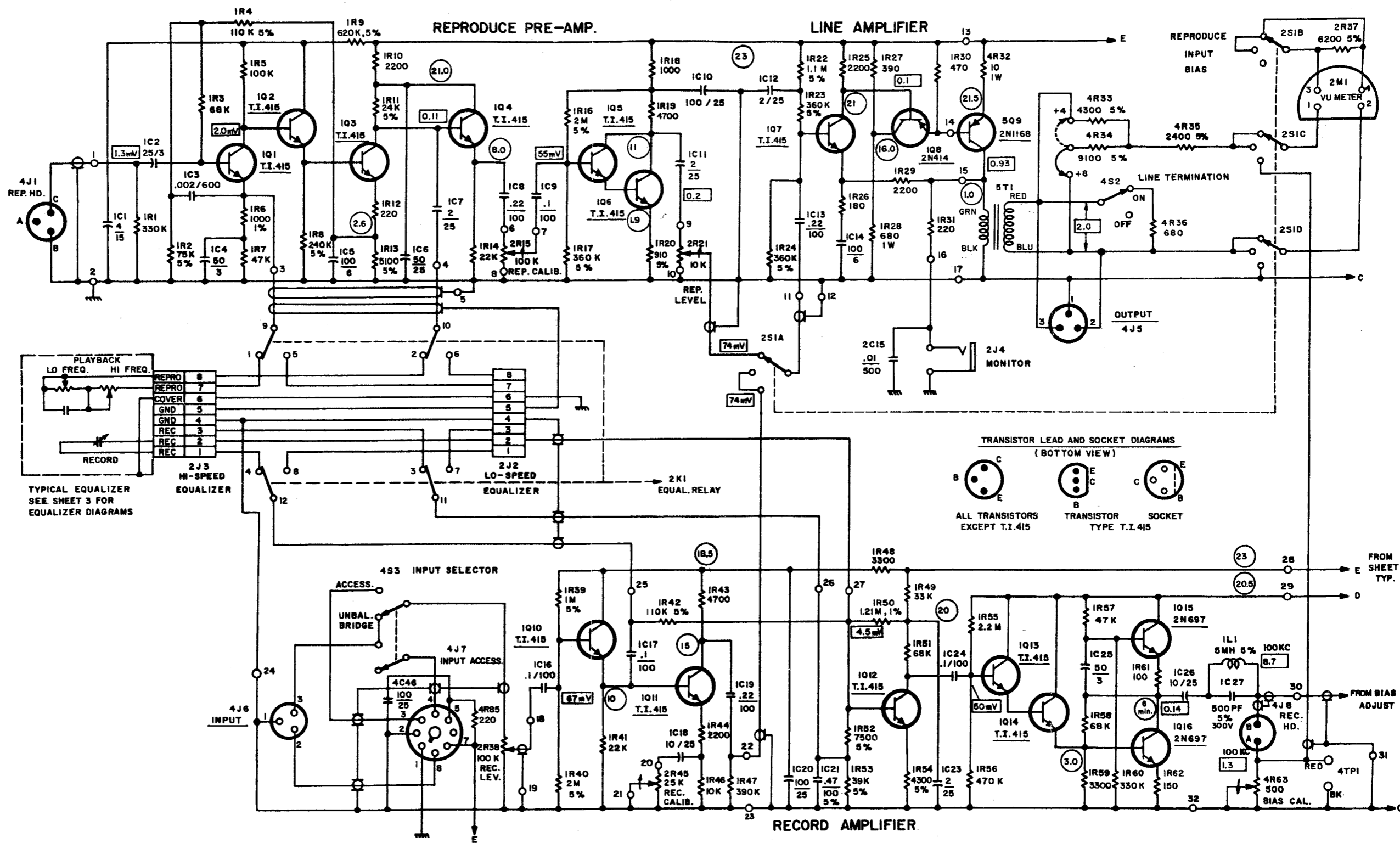
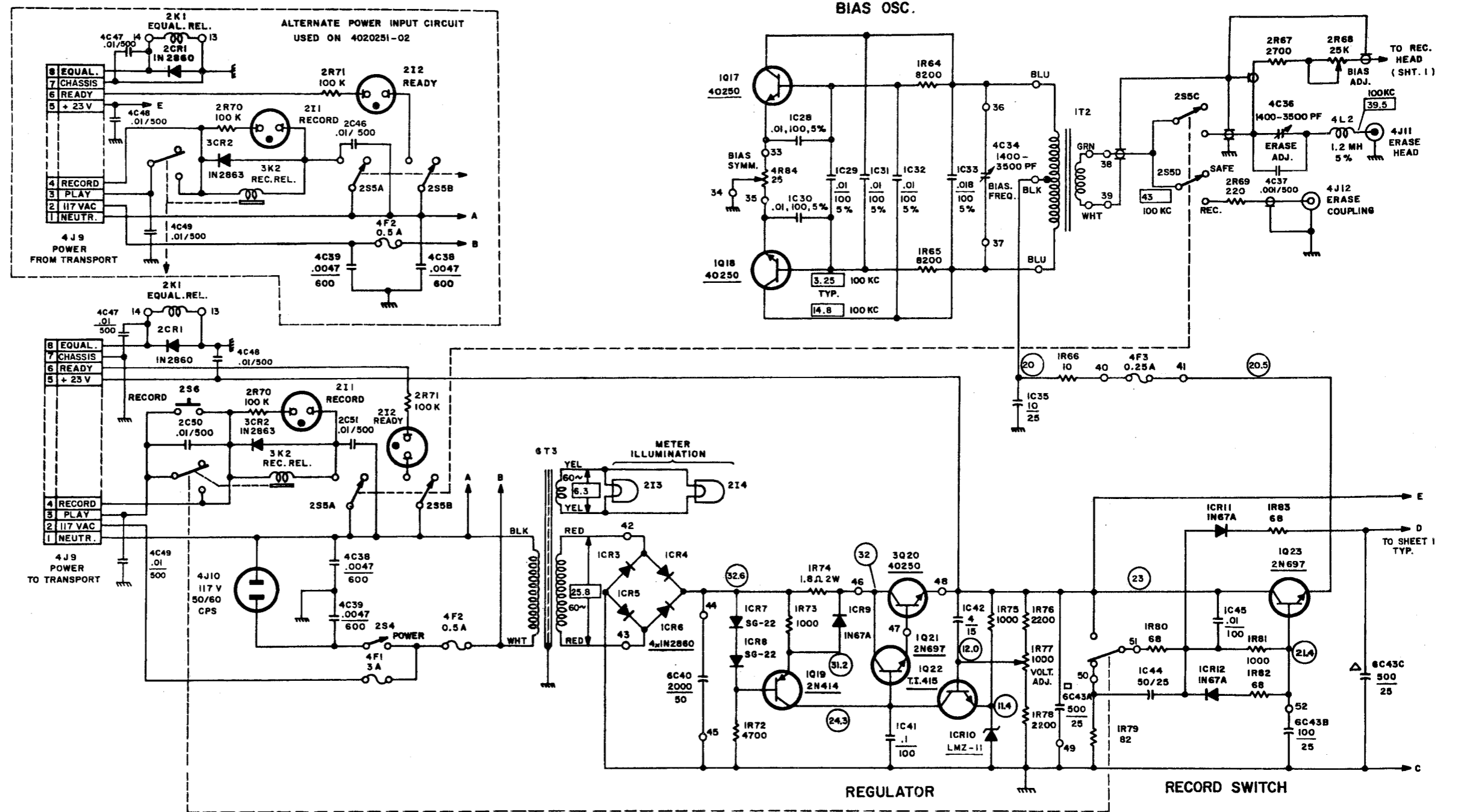


Fig 7-3 Record/Reproduce Circuit Schematic Diagram, Sheet 1



FOR NOTES SEE SHEET 3

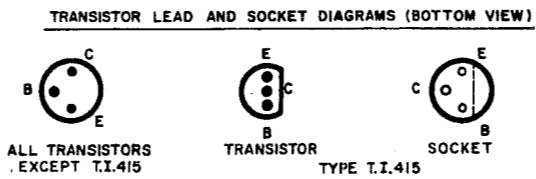
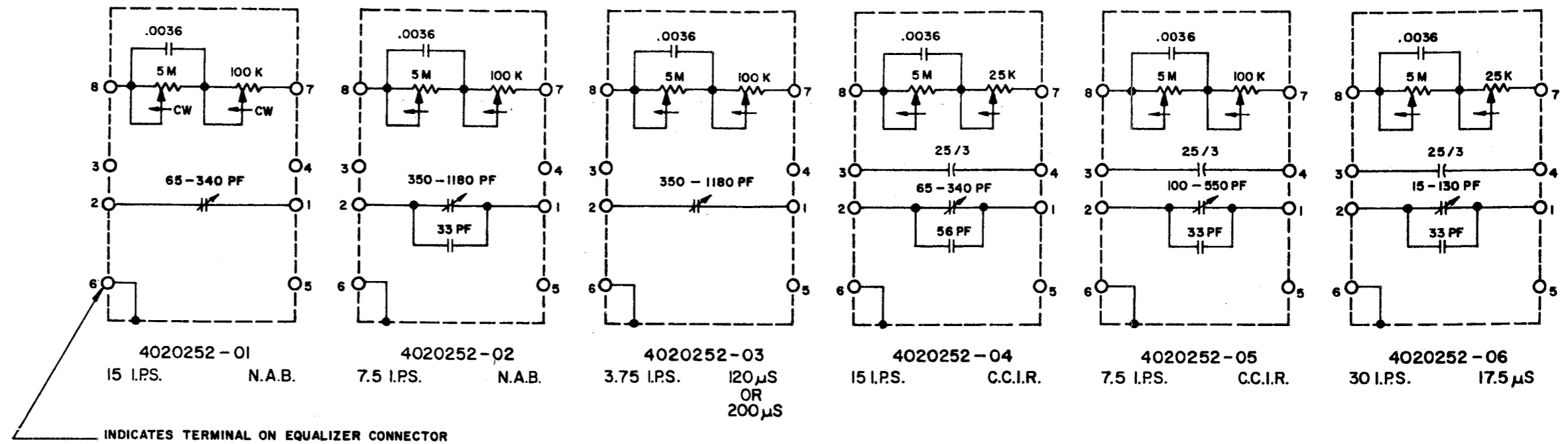
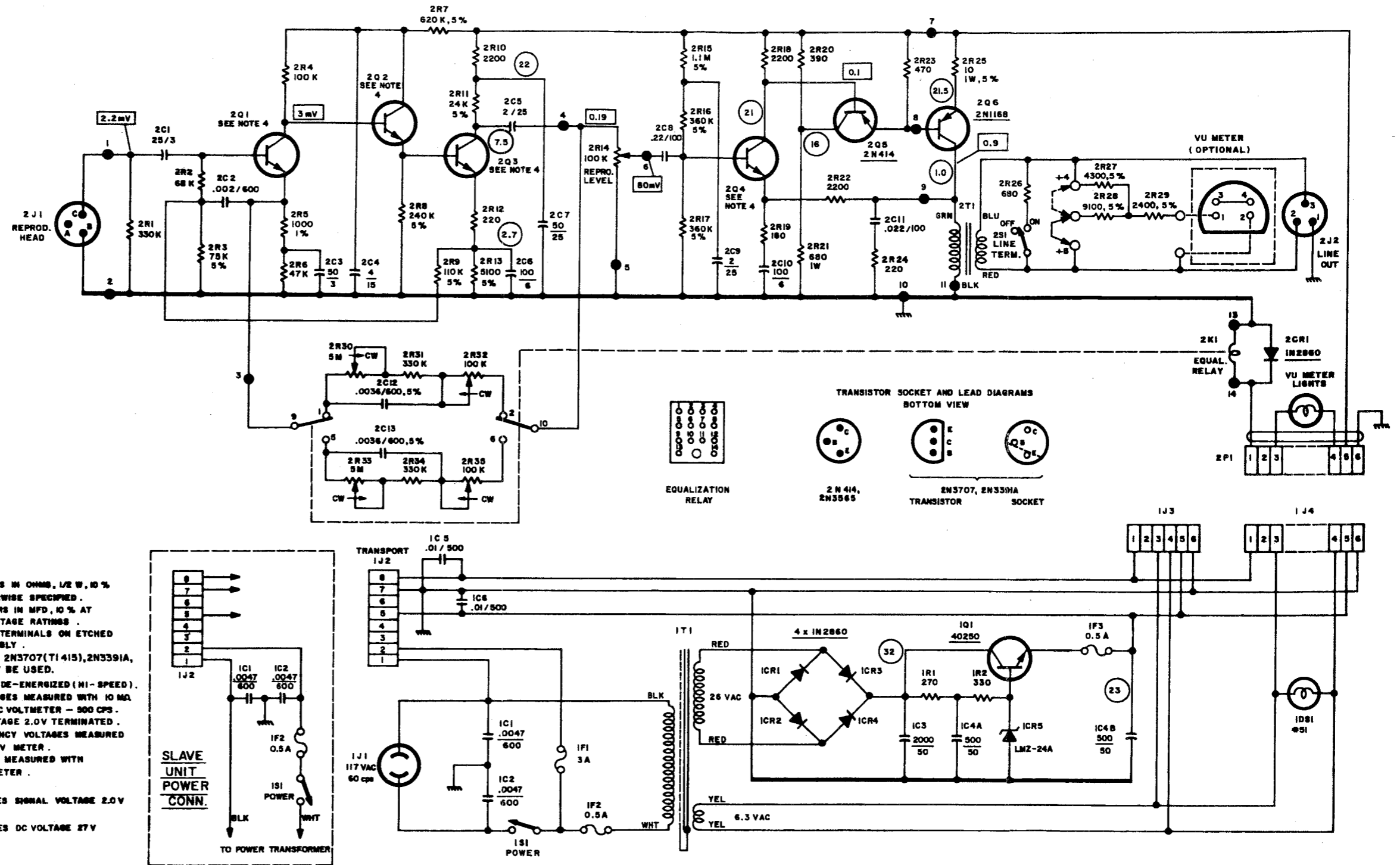


Fig. 7-4 Record/Reproduce Circuit Schematic Diagram, Sheet 2



NOTES -

1. ALL RESISTORS IN OHMS, 1/2 W, 10%, UNLESS OTHERWISE SPECIFIED.
2. ALL CAPACITORS IN MFD, UNLESS OTHERWISE SPECIFIED.
3. COMPONENT LOCATION IS INDICATED BY FIRST DIGIT OF SCHEMATIC REFERENCE NUMBER:
 - 1 - PRINTED CIRCUIT BOARD
 - 2 - FRONT PANEL
 - 3 - LEFT PANEL (WHEN FACING FRONT)
 - 4 - BACK PANEL
 - 5 - RIGHT PANEL
 - 6 - POWER SUPPLY
4. INDICATES TERMINAL ON P.C. BOARD.
5. INDICATES D.C. VOLTAGE TO GROUND, MEASURED WITH A 20,000 Ω/V METER.
6. INDICATES SIGNAL VOLTAGE TO GROUND OR OTHER LINE AS INDICATED AT 500 CPS WITH 7.5 I.P.S. N.A.B. EQUALIZER IN USE. MEASURED WITH A 10 MΩ INPUT VTVM. 60 CPS VOLTAGES MEASURED WITH A 5000 Ω/V METER.



- NOTES -
- 1 - ALL RESISTORS IN OHMS, 1/2 W, 10% UNLESS OTHERWISE SPECIFIED.
 - 2 - ALL CAPACITORS IN MFD, 10% AT SPECIFIED VOLTAGE RATINGS.
 - 3 - ● DENOTES TERMINALS ON ETCHED BOARD ASSEMBLY.
 - 4 - TRANSISTORS 2N3707(T1415), 2N3391A, 2N3565 MAY BE USED.
 - 5 - RELAY SHOWN DE-ENERGIZED (HI-SPEED).
 - 6 - SIGNAL VOLTAGES MEASURED WITH 10 MΩ IMPEDANCE AC VOLTMETER - 500 CPS. OUTPUT VOLTAGE 2.0V TERMINATED.
 - 7 - LINE FREQUENCY VOLTAGES MEASURED WITH 5000 Ω/V METER.
 - 8 - DC VOLTAGES MEASURED WITH 20,000 Ω/V METER.
- 2.0 DENOTES SIGNAL VOLTAGE 2.0V
- 27 DENOTES DC VOLTAGE 27V

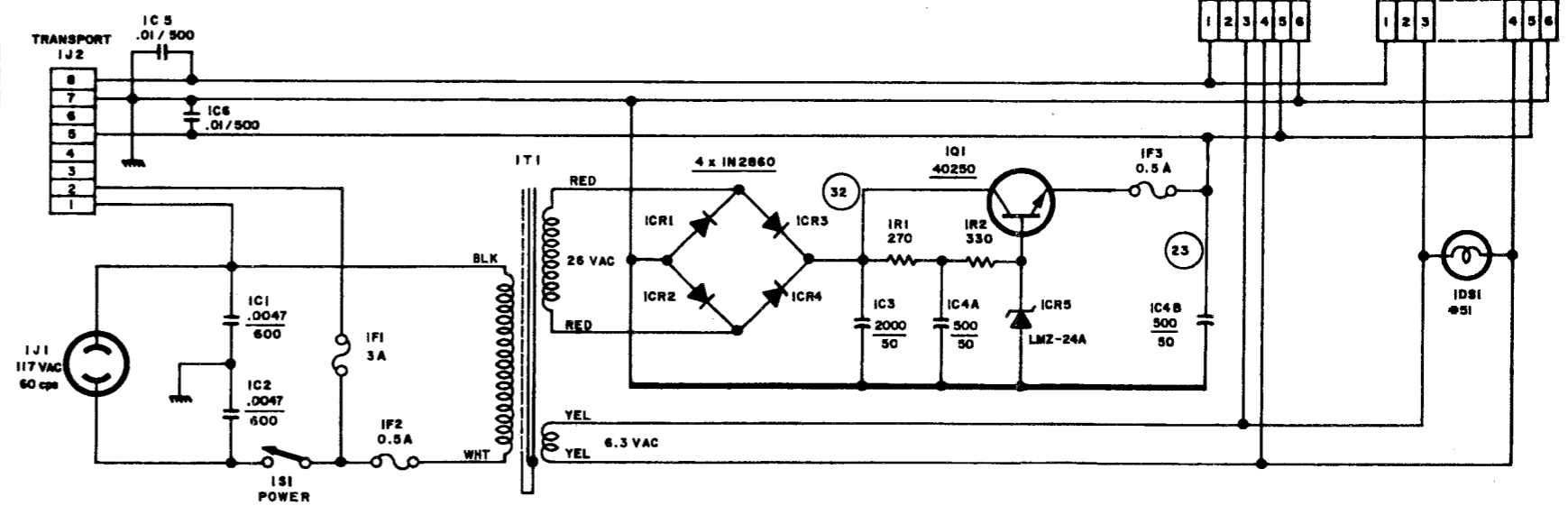
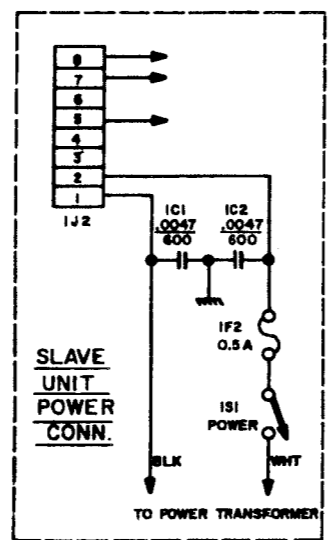
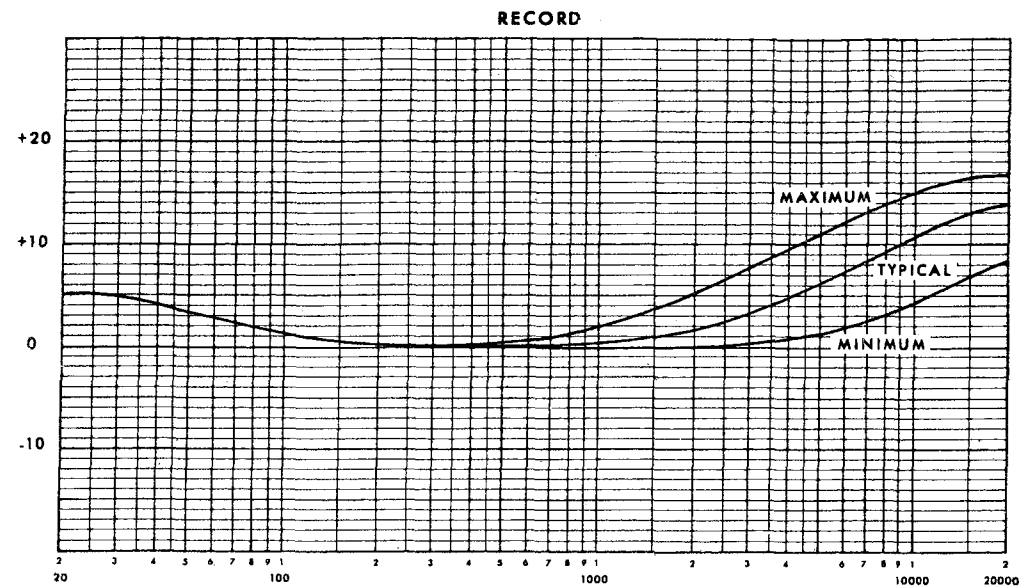
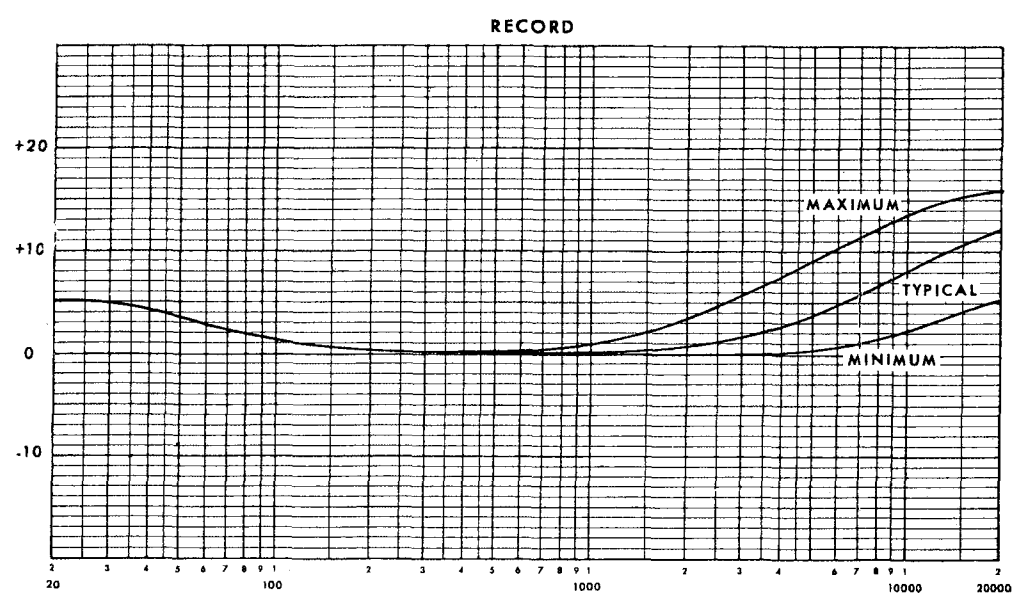
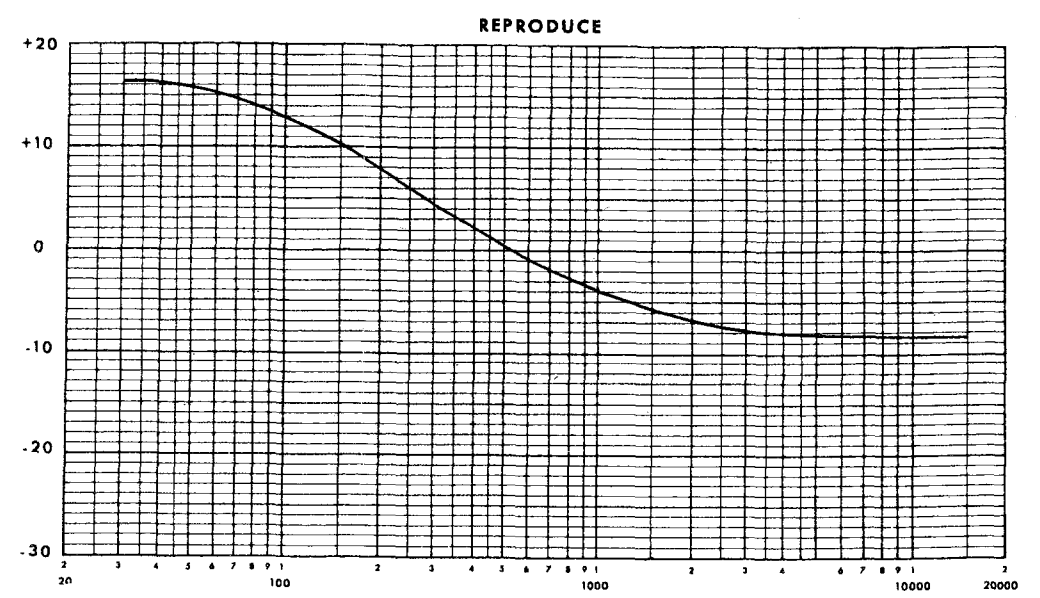


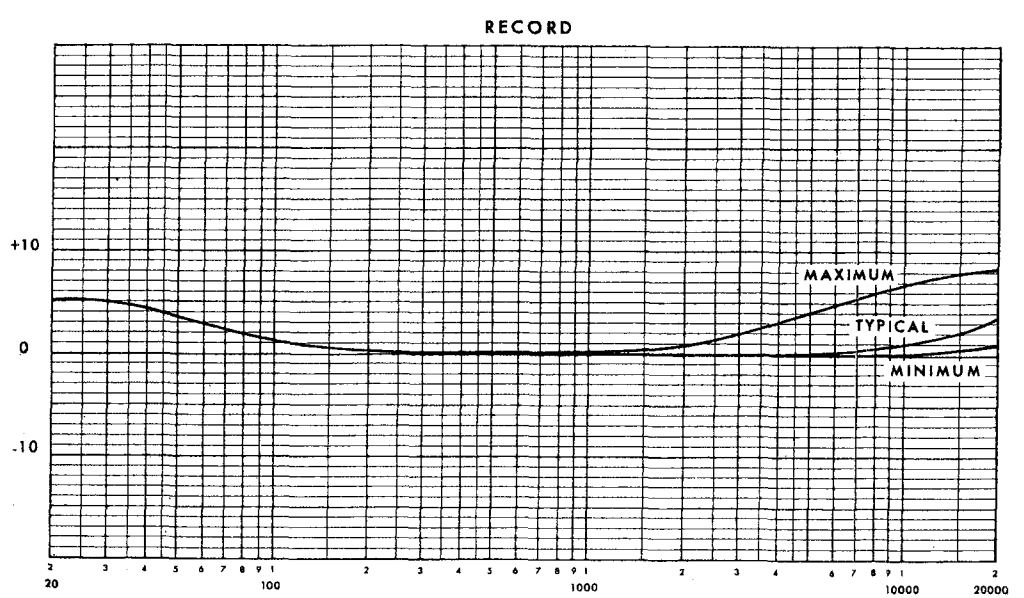
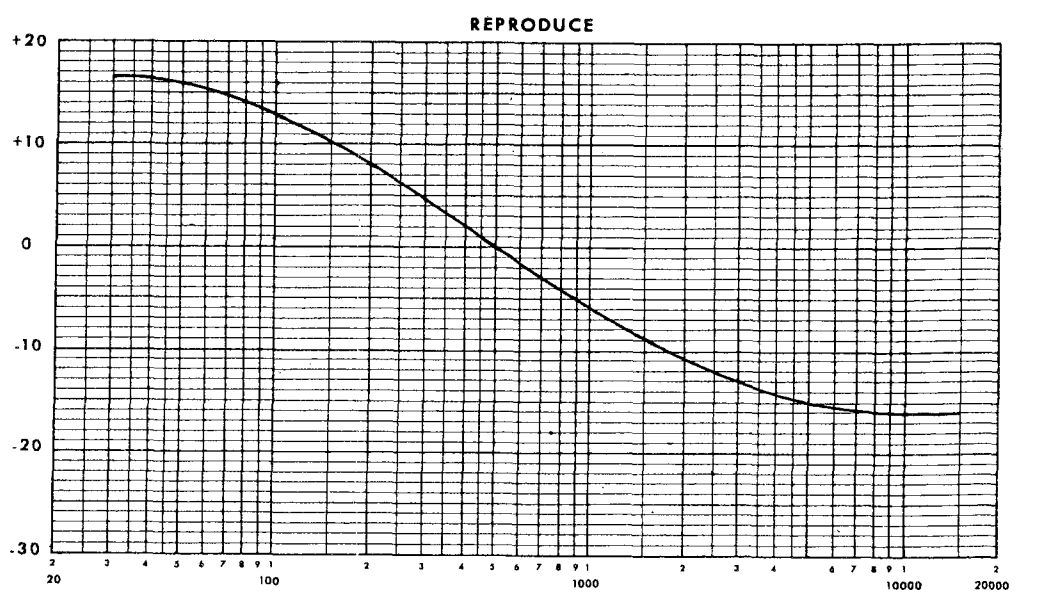
Fig. 7-6 Reproduce-only Circuit Schematic Diagram



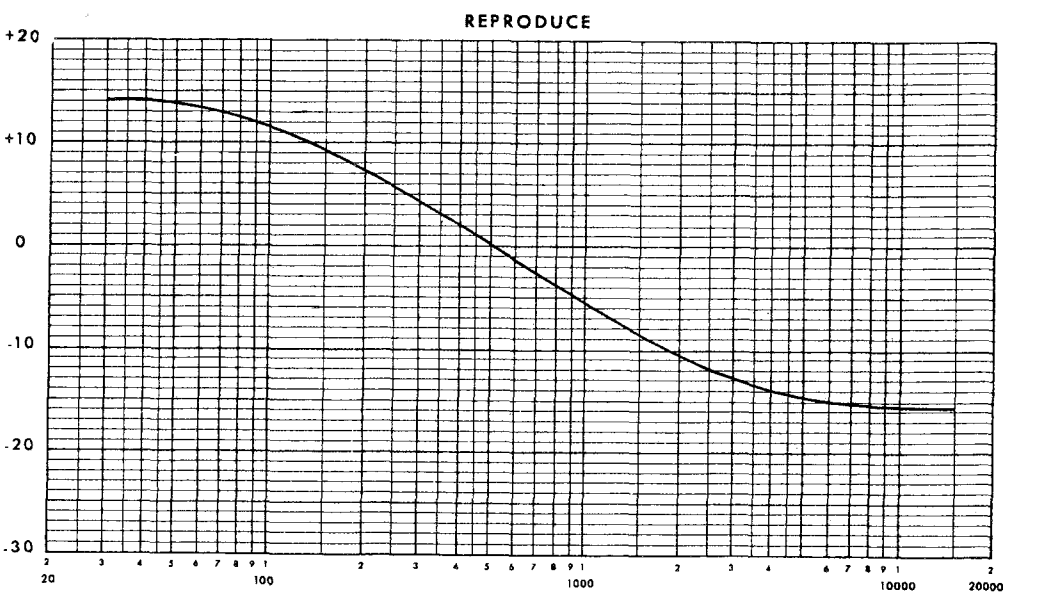
3 1/4 ips (120 usec)

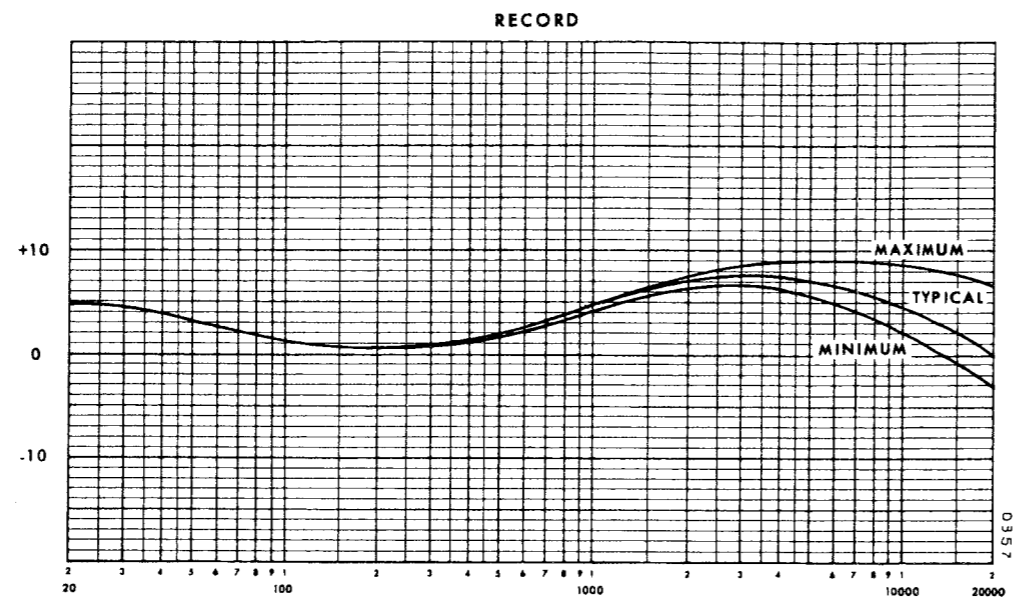


7 1/2 ips NAB

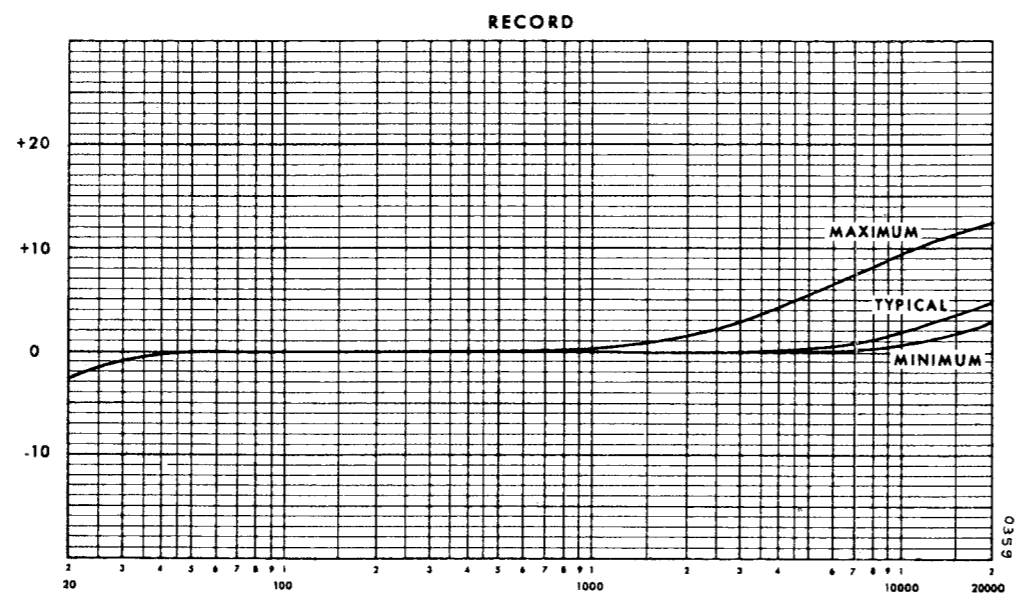
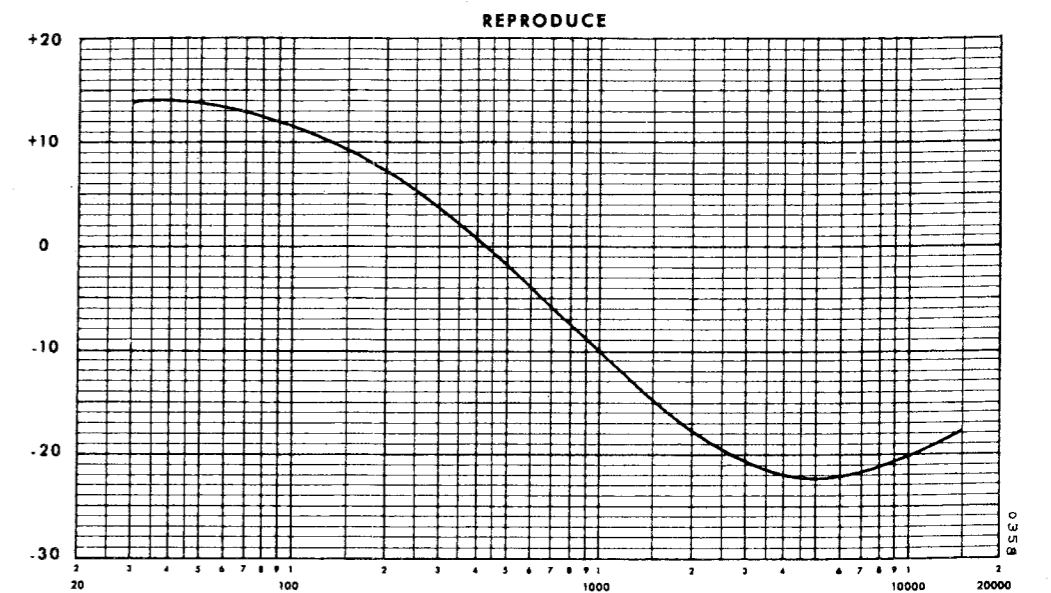


15 ips NAB

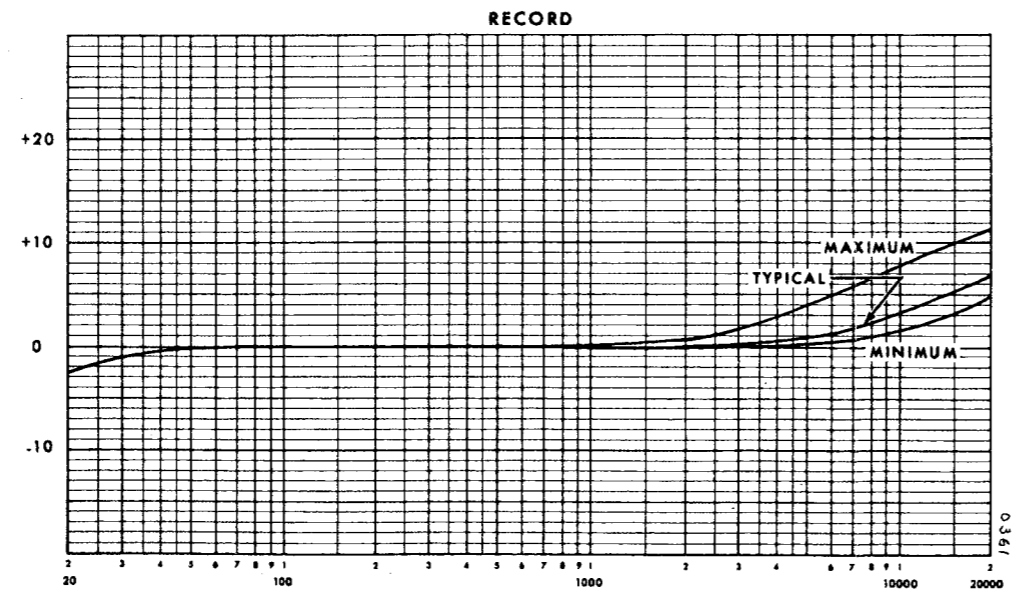
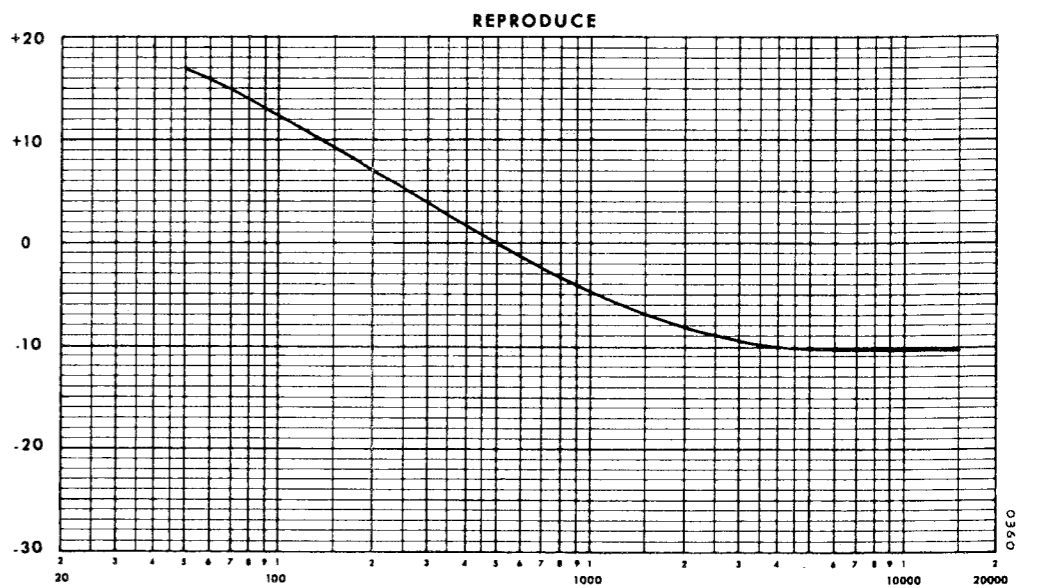




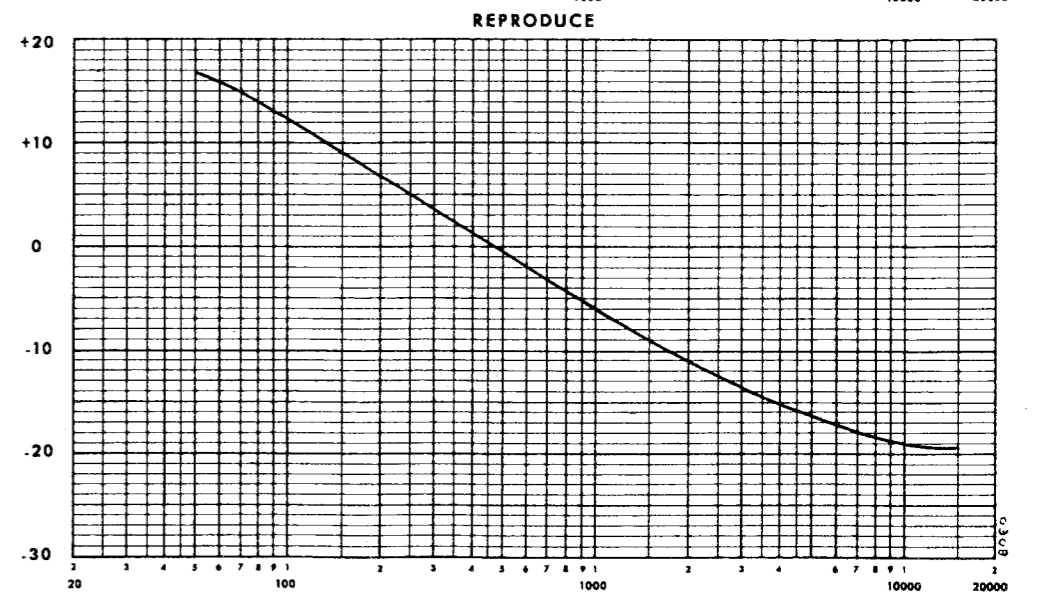
15 ips AME

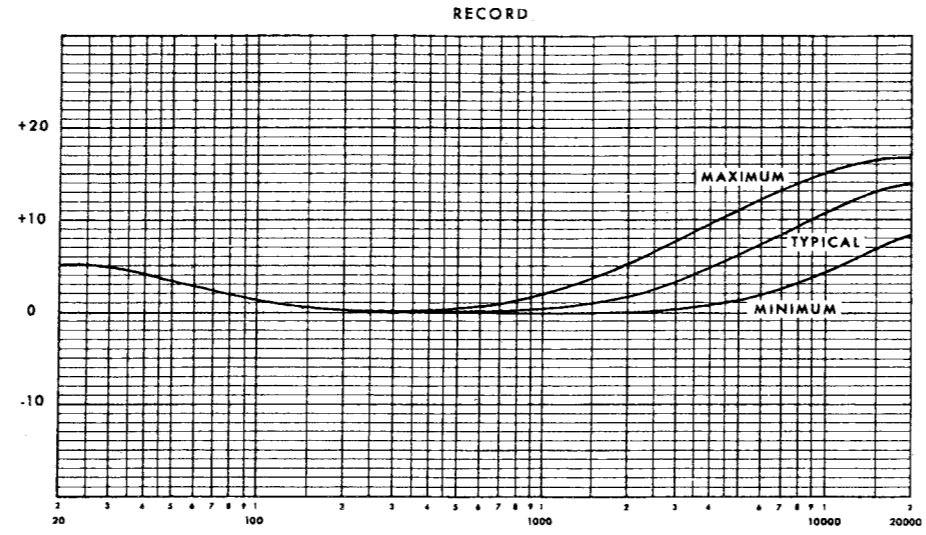


7 1/2 ips CCIR

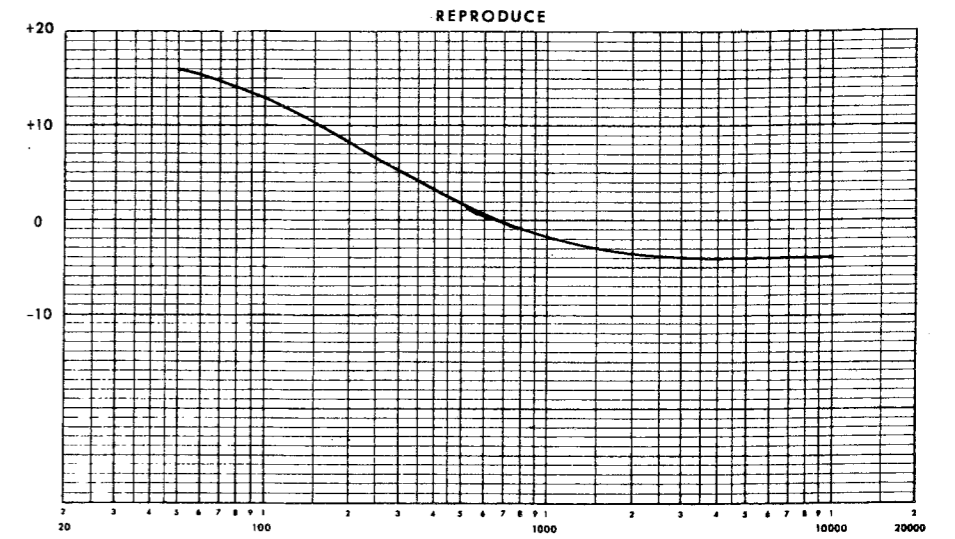


15 ips CCIR





3 3/4 ips (200 usec)



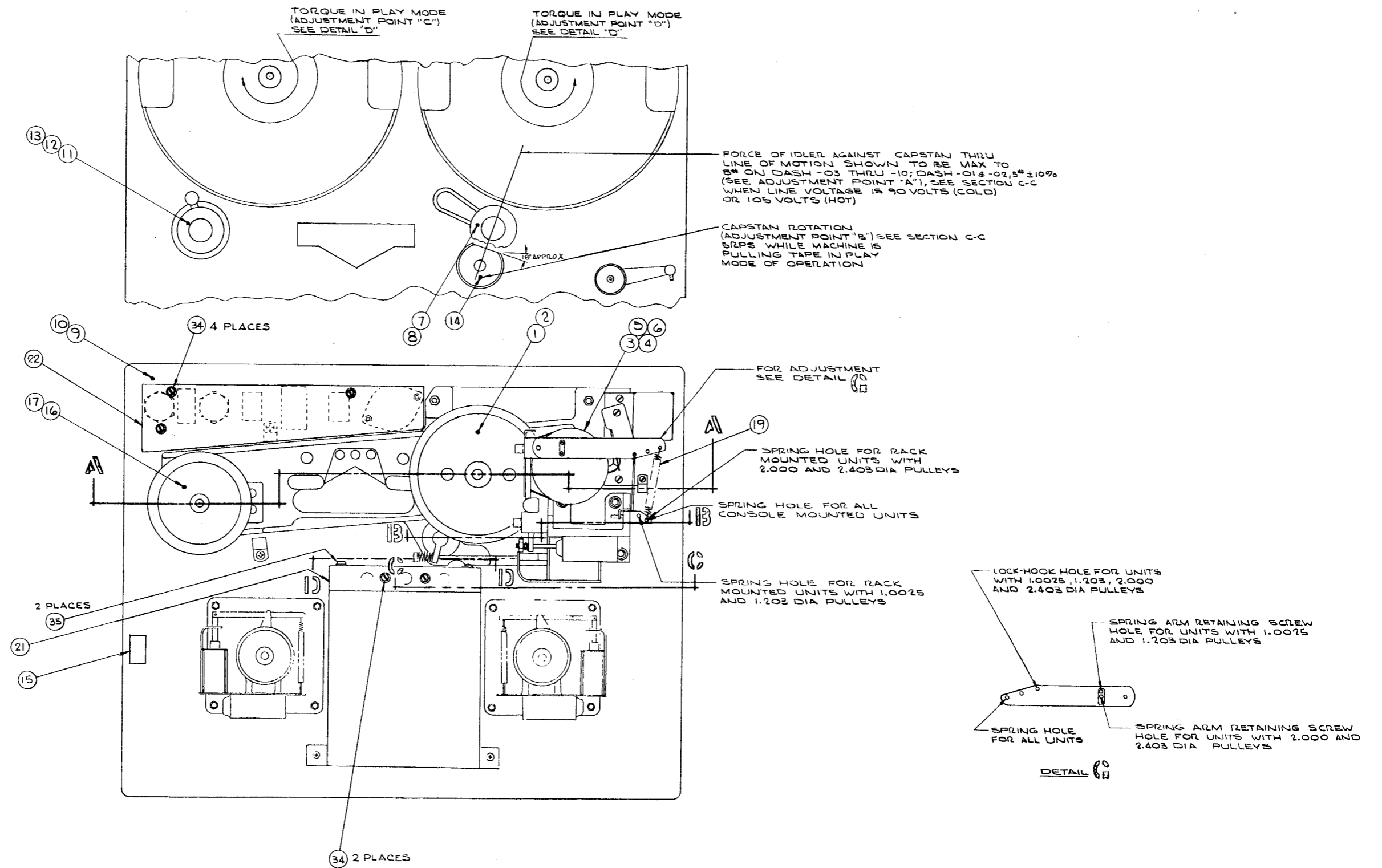
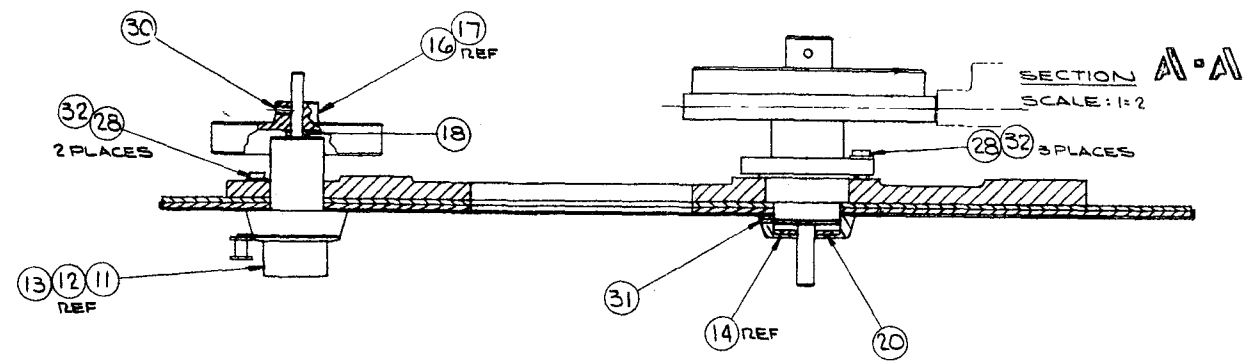
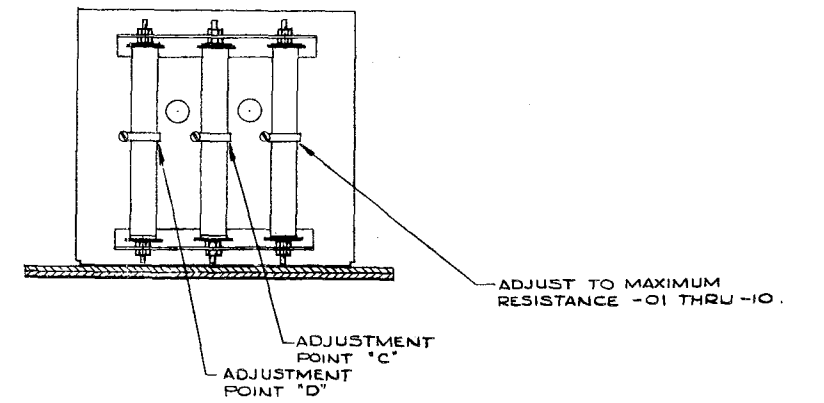


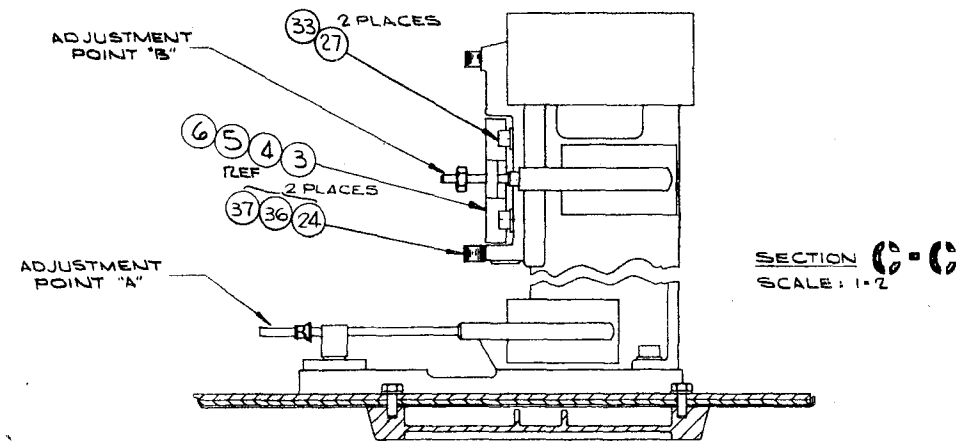
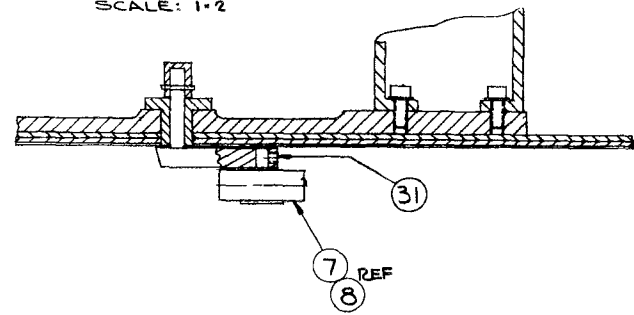
Fig. 7-10 Tape Transport Assembly, Sheet 1



SECTION D-D



SECTION B-B
SCALE: 1:2



CONNECTOR DIAGRAM

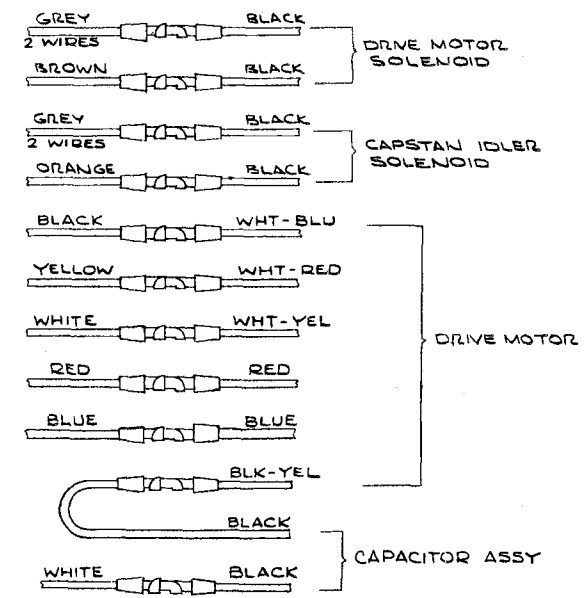


Fig. 7-11 Tape Transport Assembly, Sheet 2

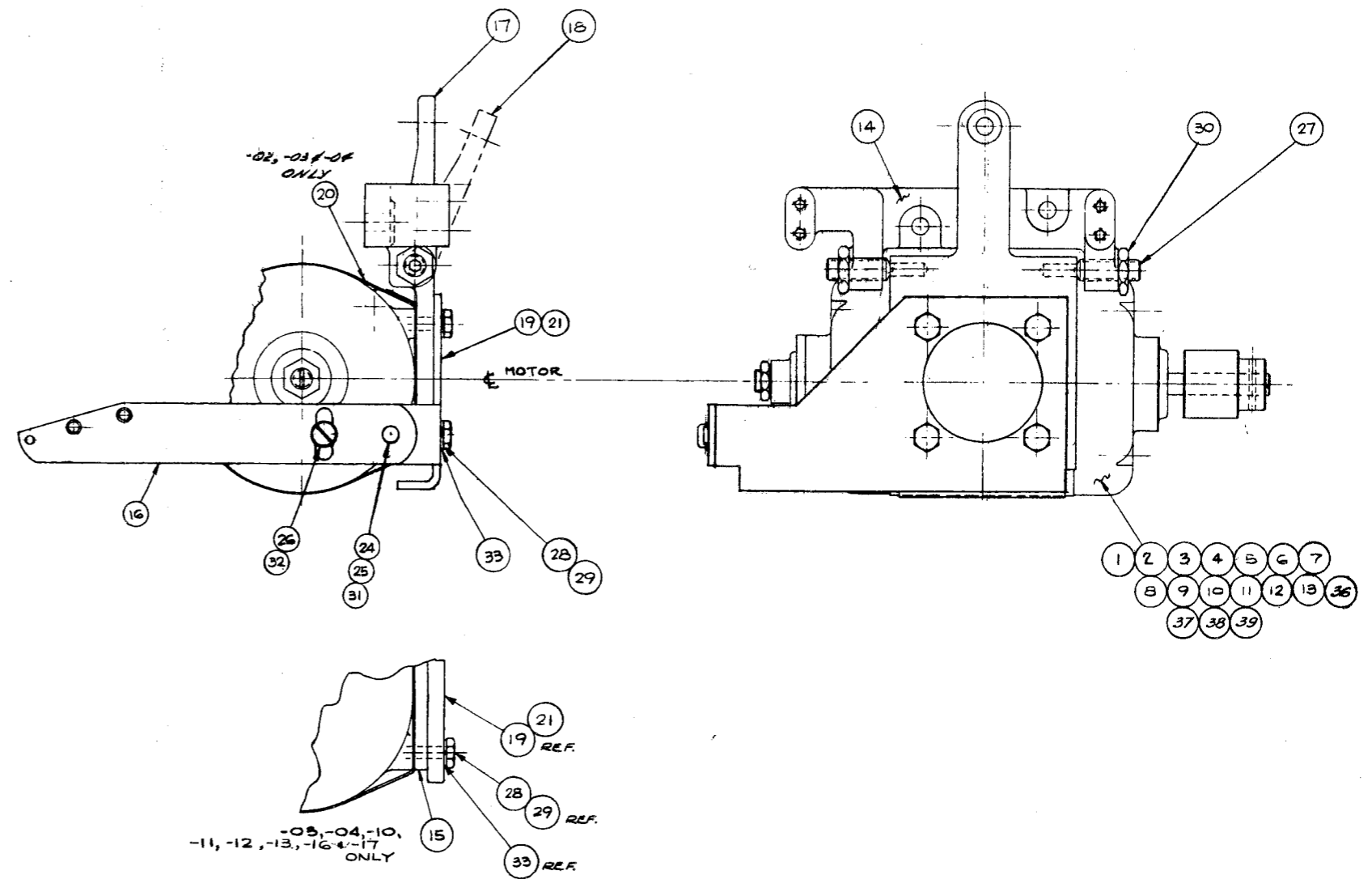


Fig. 7-12 Drive Motor Assembly

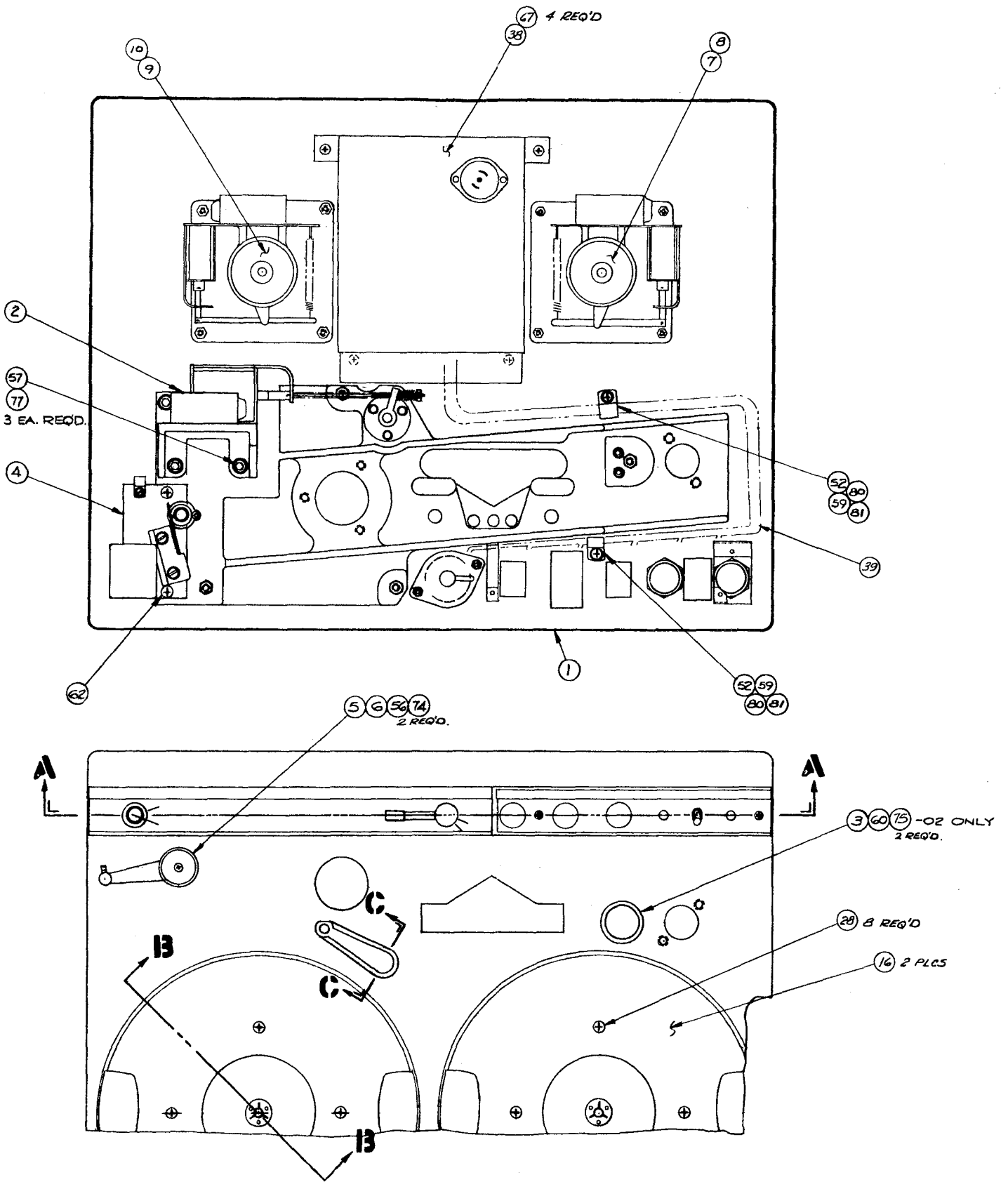


Fig. 7-13 Transport Subassembly, Sheet 1

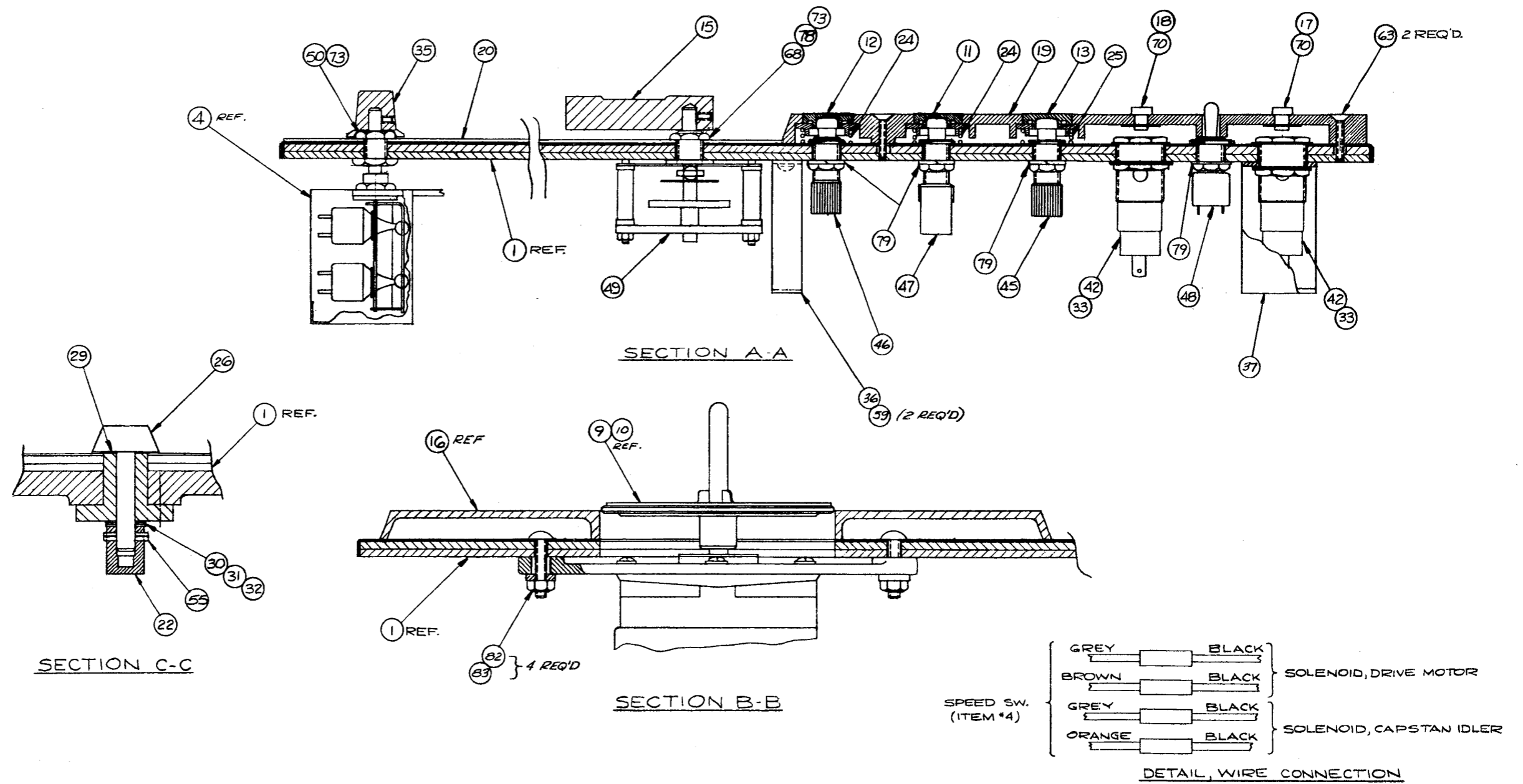


Fig. 7-14 Transport Subassembly, Sheet 2

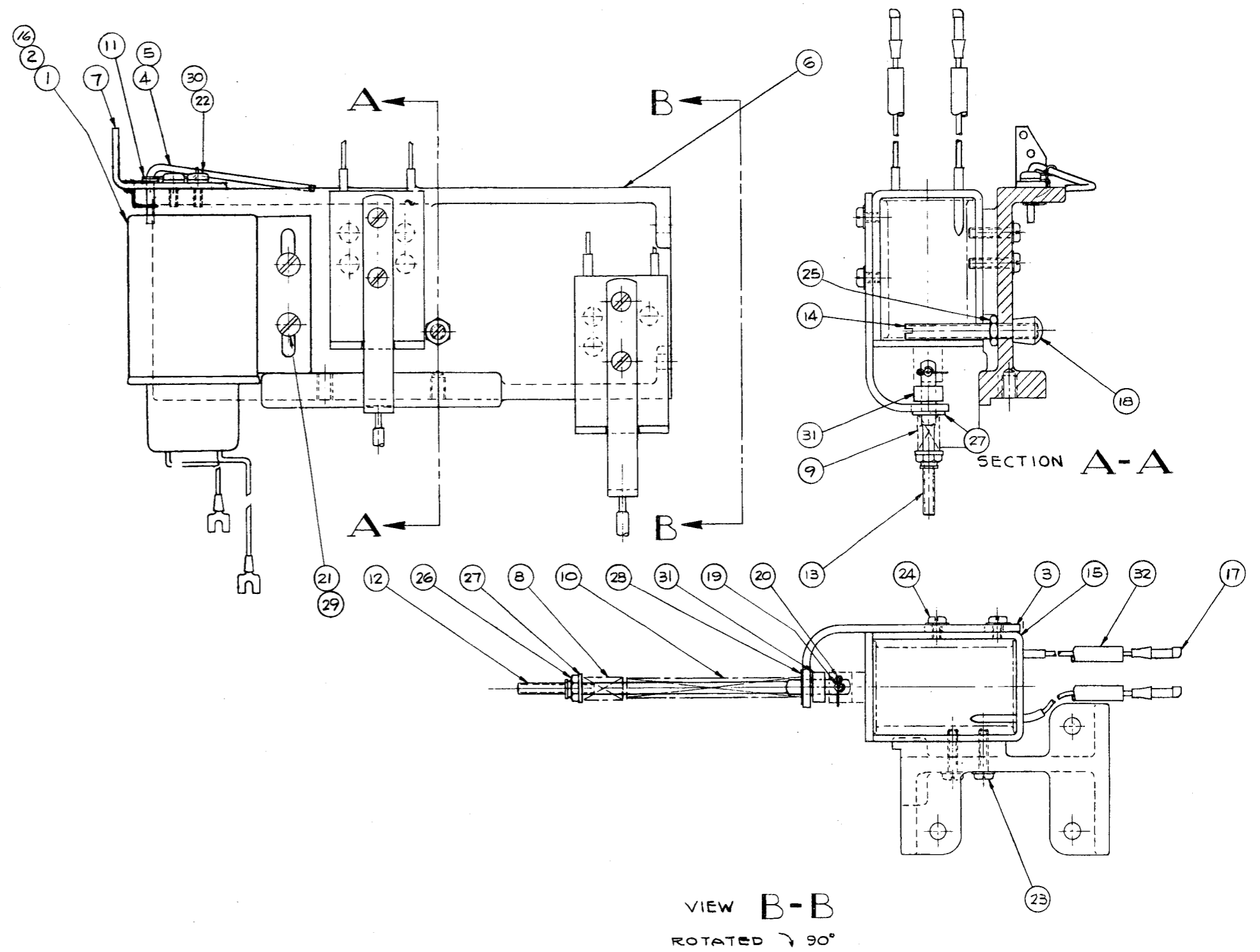


Fig. 7-15 Support Assembly, Drive Solenoid

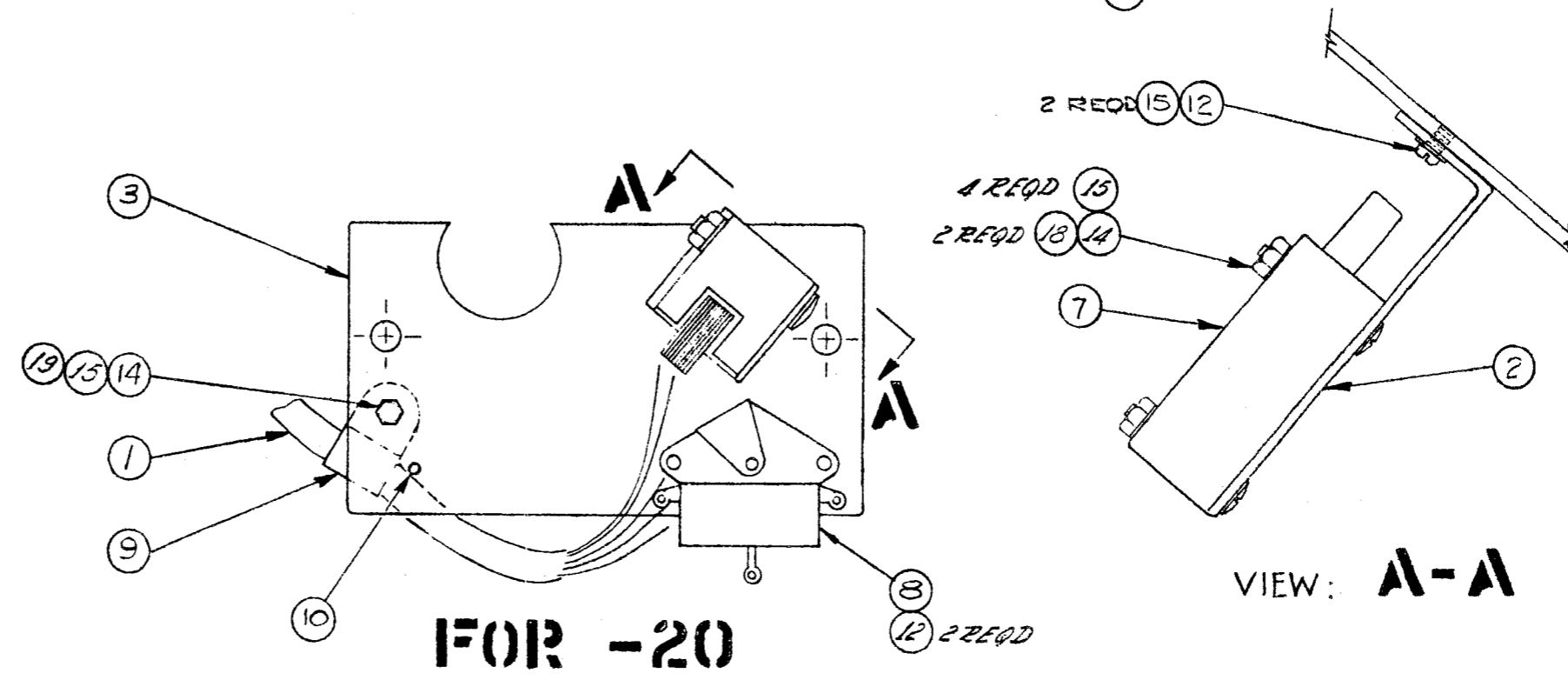
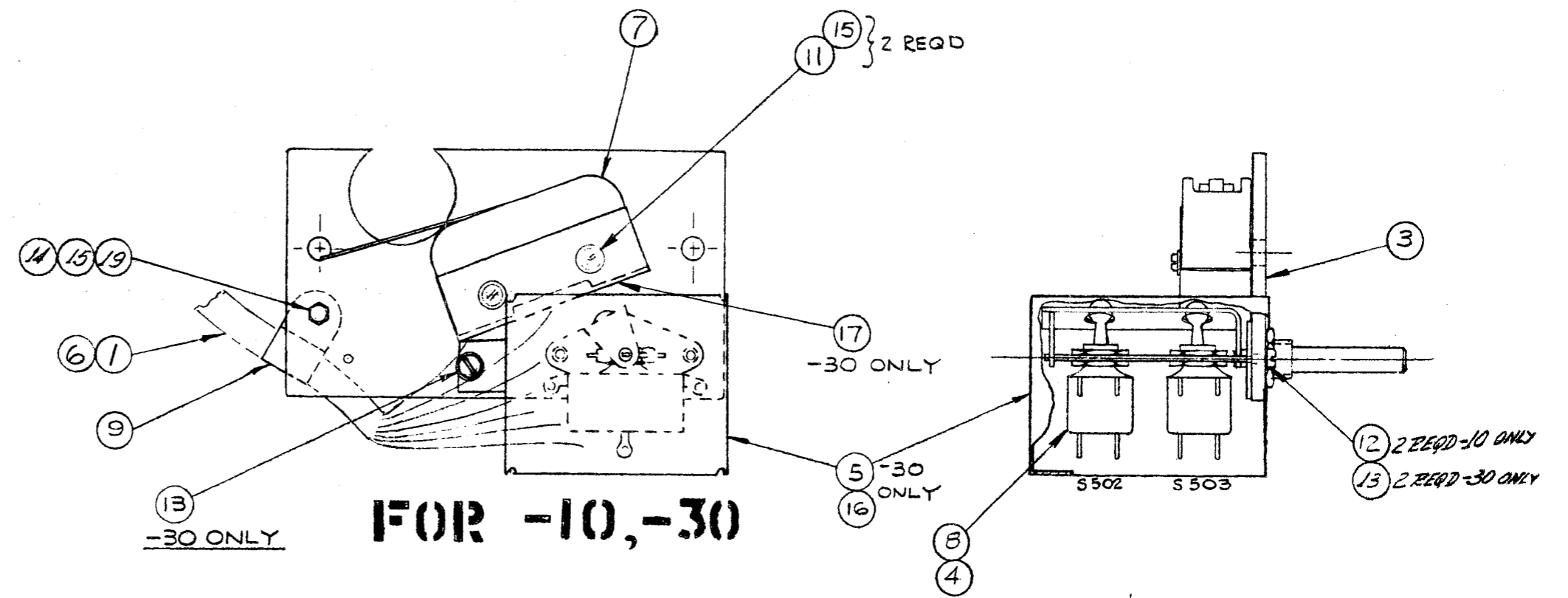
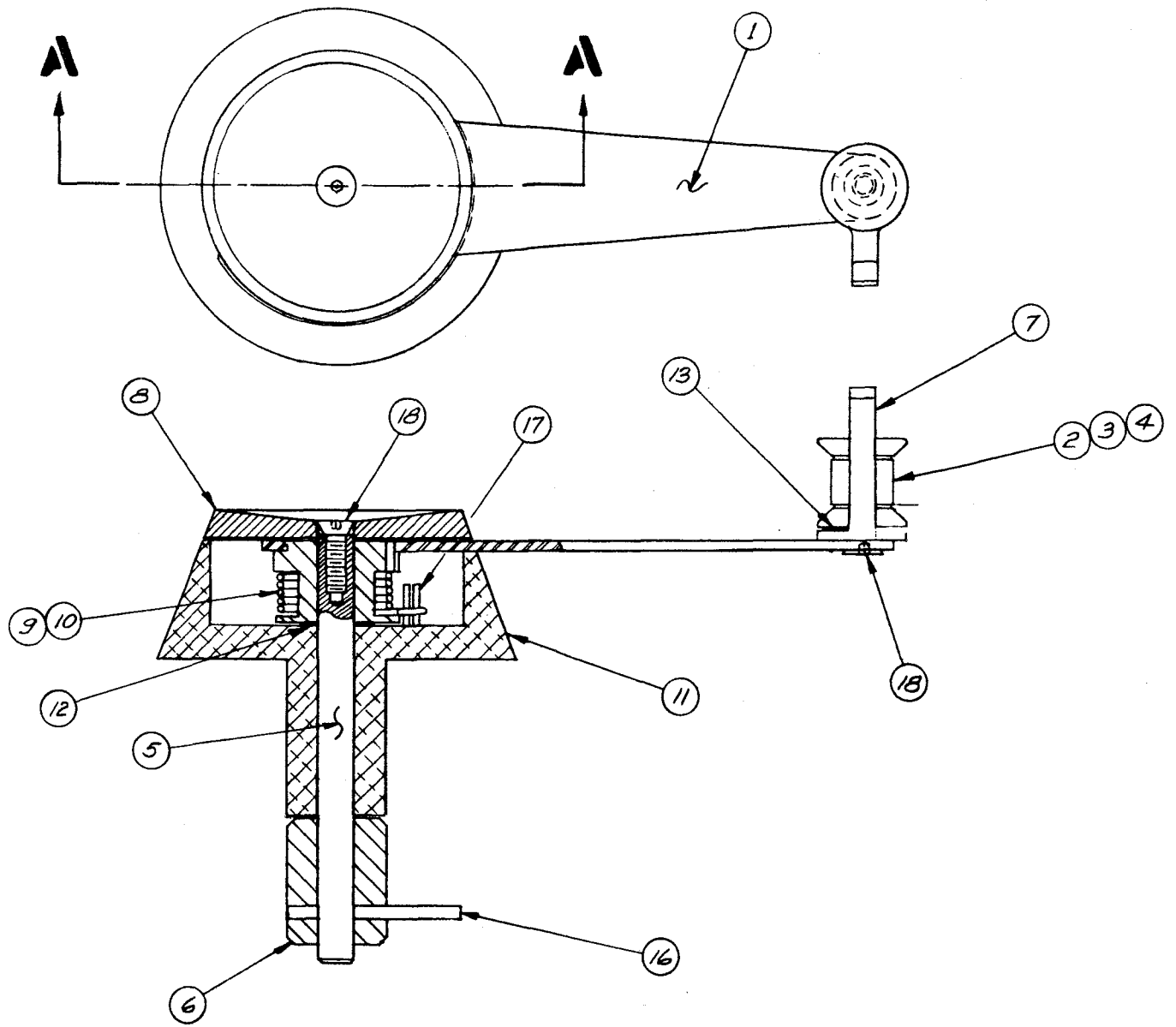


Fig. 7-16 Drive Switch Assembly



SEC. A-A

Fig. 7-17 Takeup Tension Arm Assembly

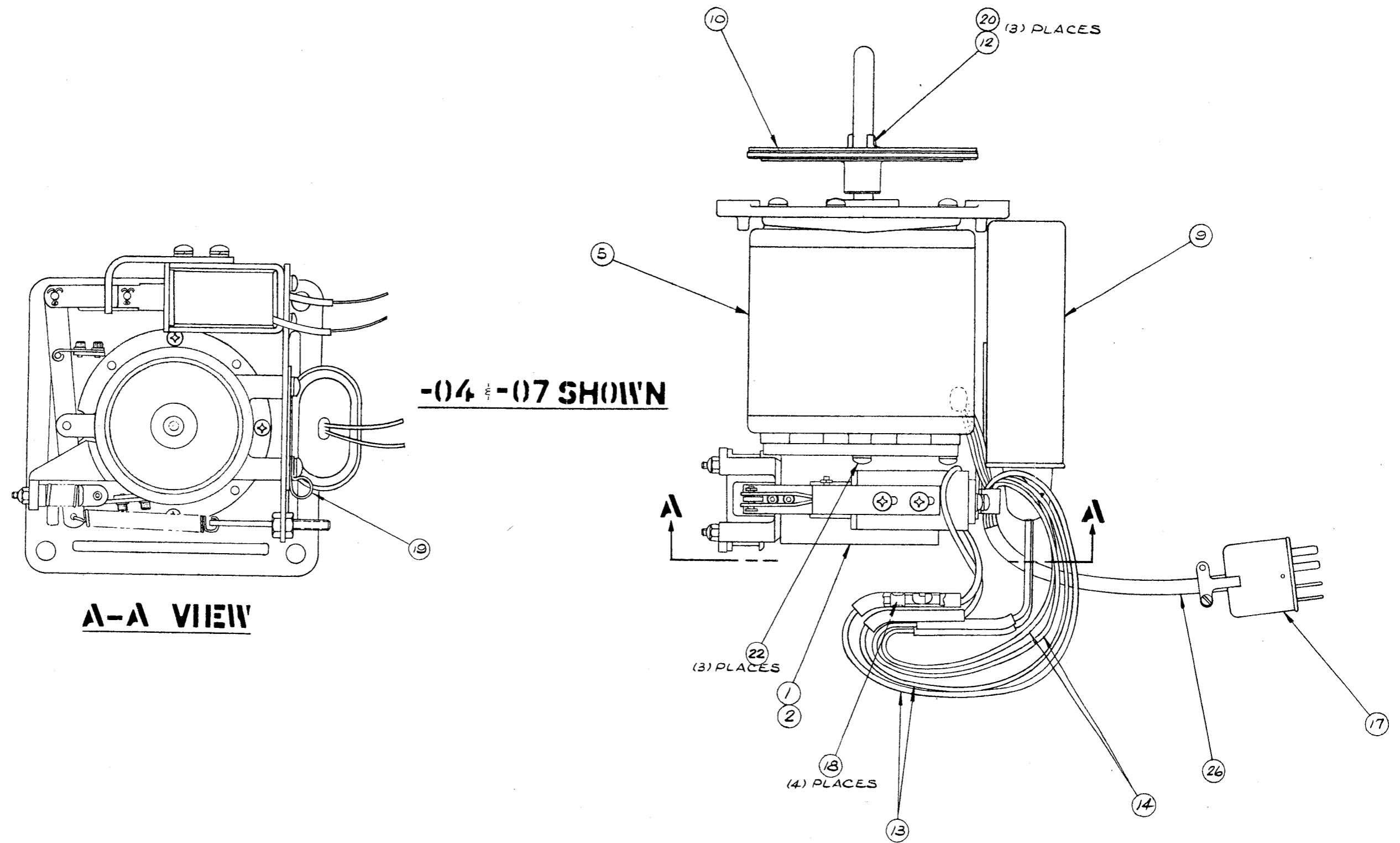


Fig. 7-18 Typical Reel Assembly (Rewind)

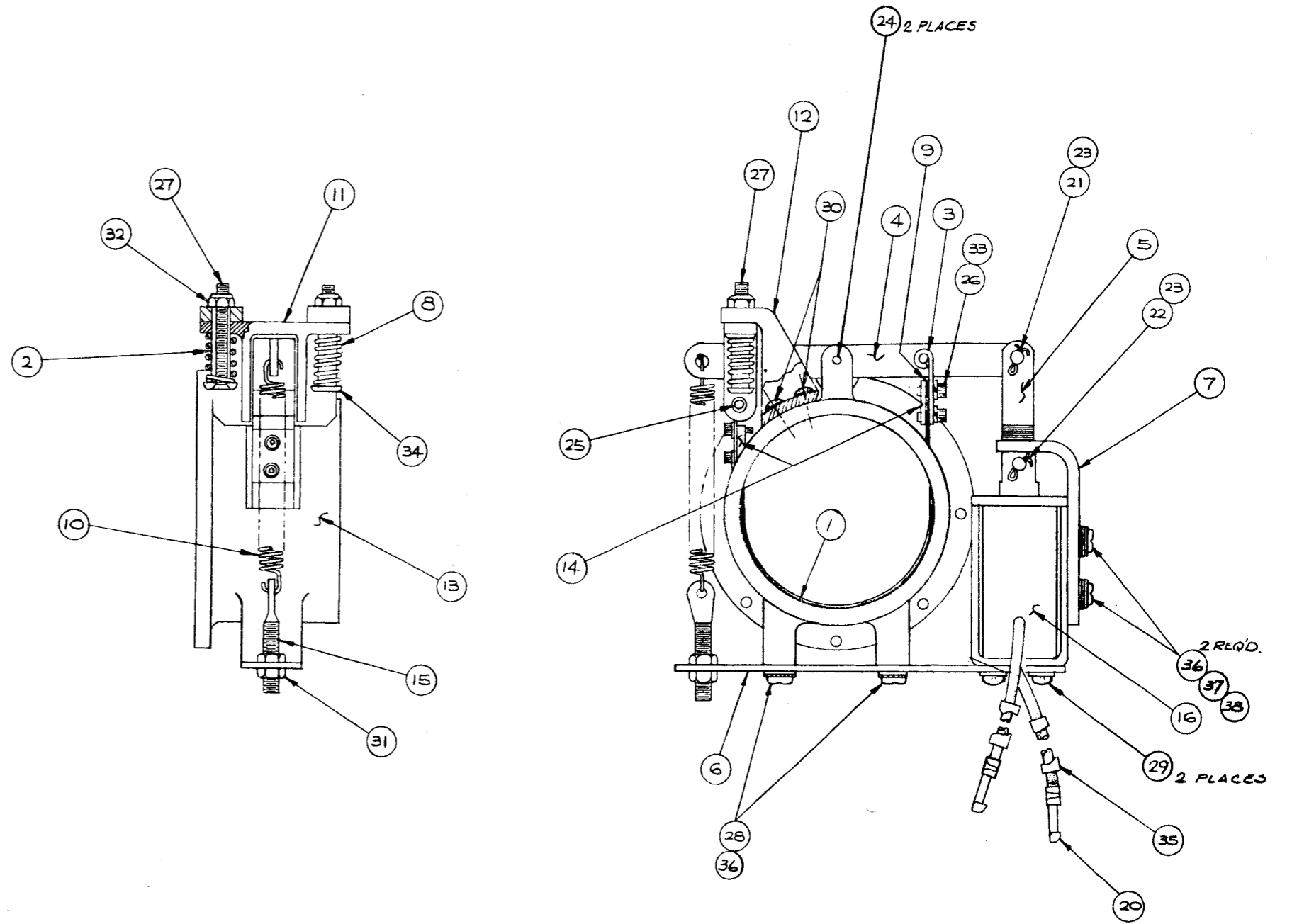


Fig. 7-19 Typical Brake Assembly (Rewind)

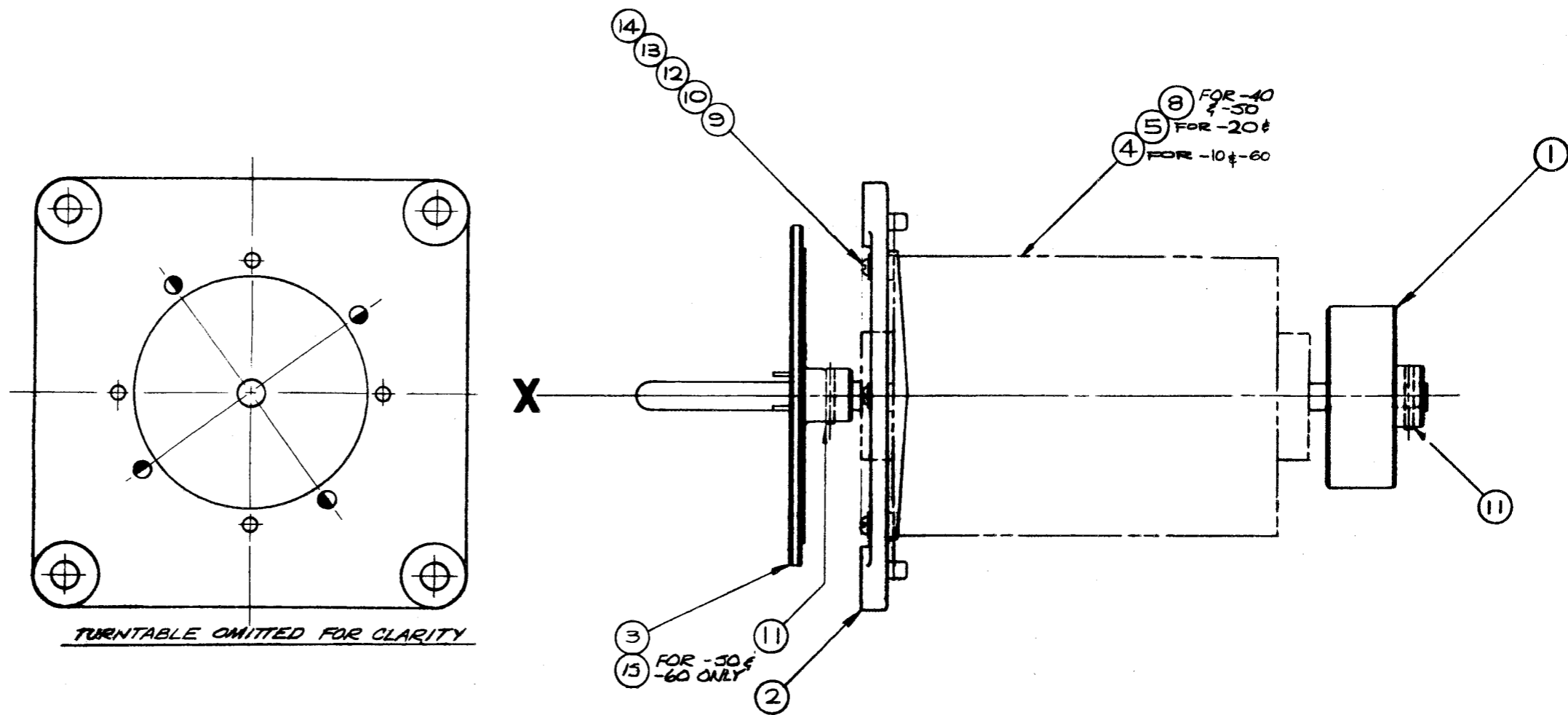
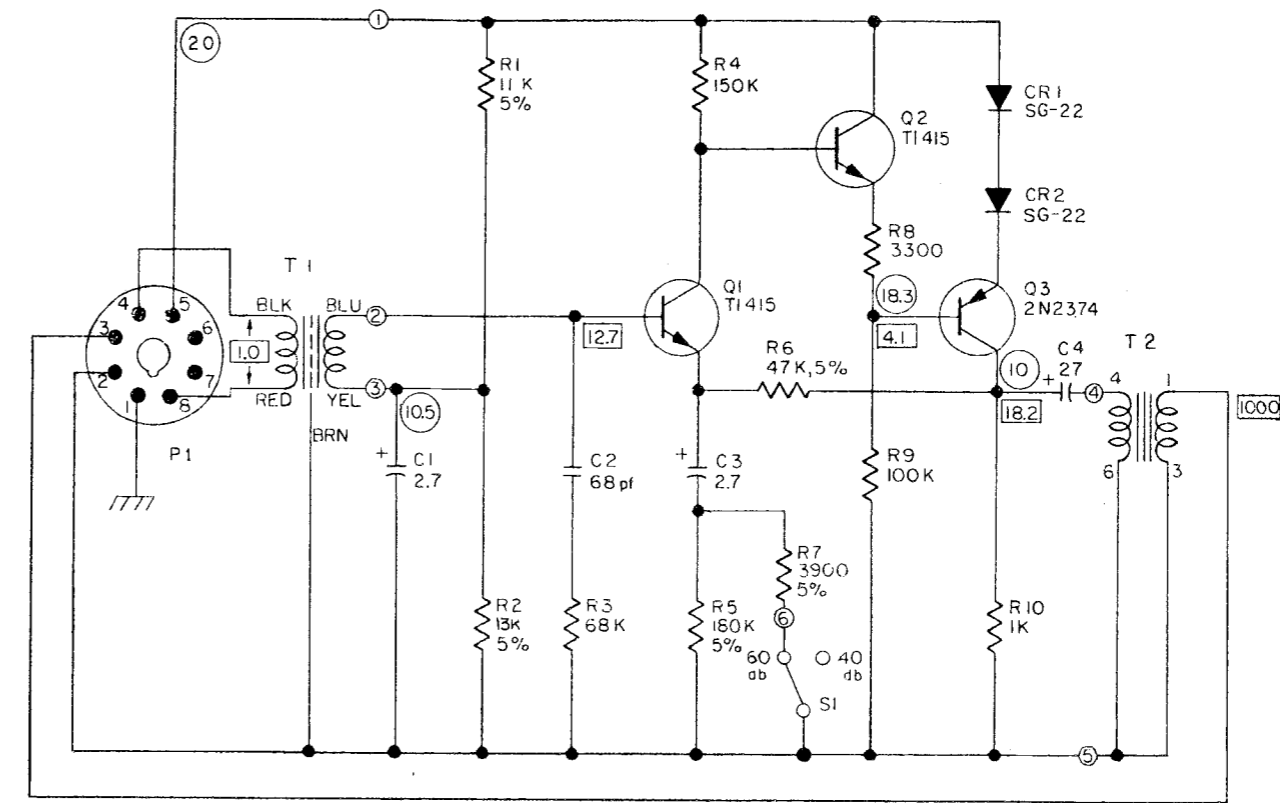
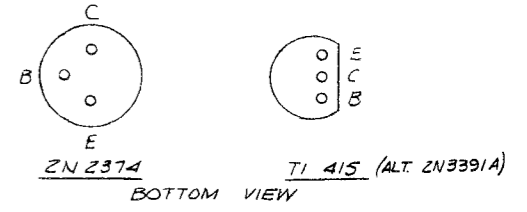


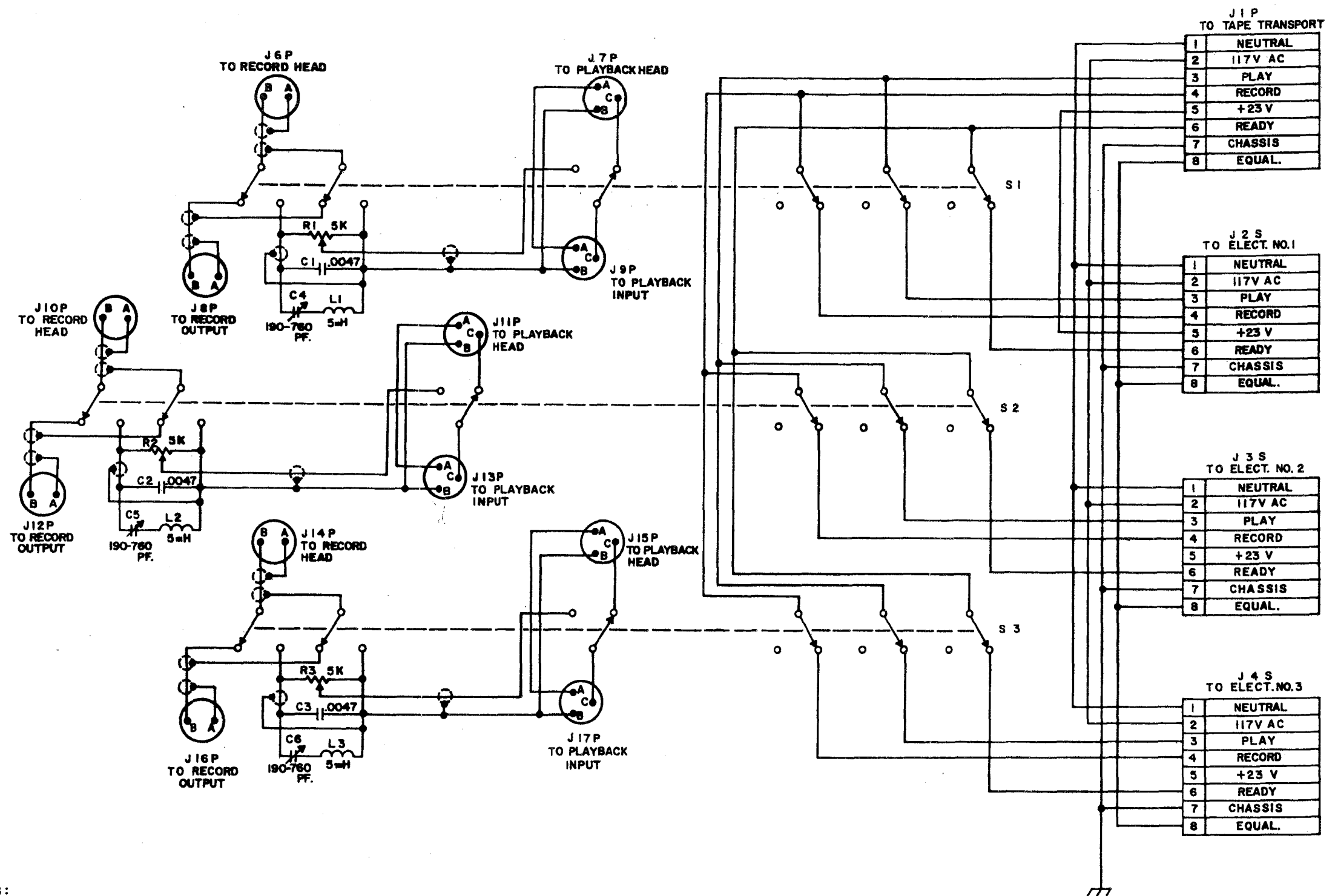
Fig. 7-20 Torque Motor Assembly

TRANSISTOR BASE DIAGRAM



- NOTES:
1. DENOTES SHIELD CAN.
 2. ALL RESISTORS ARE IN OHMS $\pm 10\%$, $\frac{1}{4}$ WATT, UNLESS OTHERWISE SPECIFIED.
 3. ALL CAPACITORS ARE IN MICROFARADS, 15 VOLT, UNLESS OTHERWISE SPECIFIED.
 4. (20) INDICATES D.C. VOLTAGE TO GROUND, MEASURED WITH A 20,000 Ω/V METER
 5. INDICATES RMS MILLIVOLTS TO GROUND AT 500 CPS WITH S1 IN 60 DB POSITION AND LOADED WITH 100K RESISTOR.
 6. TRANSISTORS Q1 & Q2-T1415 IS INTERCHANGEABLE WITH 2N 3391 A.

Fig. 7-21 Microphone Preamplifier Schematic Diagram



NOTES:
 1. SWITCHES ARE SHOWN IN NORMAL POSITION.

Fig. 7-22 Three Channel Sel-sync Schematic Diagram

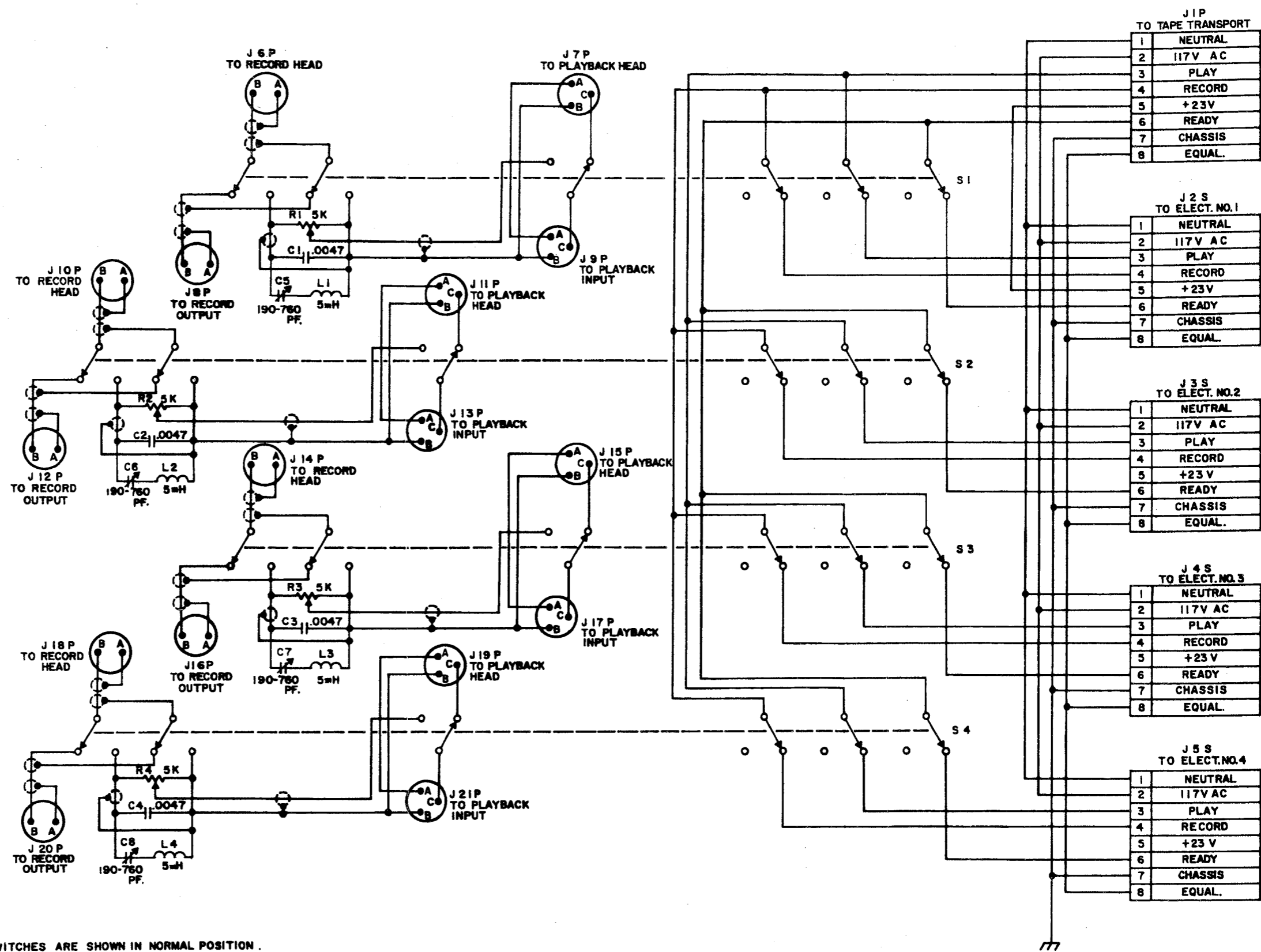


Fig. 7-23 Four Channel Sel-sync Schematic Diagram